Technical Note

Gross Domestic Product, Third Quarter 2001 (Advance)

October 31, 2001

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news release; the note also provides some perspective on the estimates. Additional material will become available in the next several days; much of it will be posted to BEA's Web site <www.bea.doc.gov>. In a few weeks, the estimates will be published in BEA's monthly journal, the *Survey of Current Business*. The *Survey* also will provide a more detailed analysis of the estimates ("The Business Situation").

Real GDP: Based on data available at this time, BEA estimates that real GDP decreased 0.4 percent (annual rate) in the third quarter of 2001, after increasing 0.3 percent in the second quarter. The largest contributors to the downturn were decelerations in consumer spending and in spending by state and local governments and a larger decrease in exports. The 0.4-percent decrease is the weakest showing for GDP since the first quarter of 1991, when it decreased 2.0 percent. The effects of the terrorist attacks of September 11 are reflected in the third-quarter estimate, as described below.

Real final sales of domestic product -- GDP less change in private inventories -- was unchanged in the third quarter, following an increase of 0.7 percent in the second. Inventories were drawn down for the third consecutive quarter and subtracted 0.37 percentage point from the third-quarter change in real GDP; inventory investment had subtracted 0.42 percentage point from the second-quarter change.

Prices: The price index for gross domestic purchases decreased 0.3 percent in the third quarter, after increasing 1.3 percent in the second. Excluding food and energy prices, which are more volatile than most other prices, the index increased 0.4 percent in the third quarter, following an increase of 0.9 percent in the second. The third-quarter downturn in prices also reflected a deceleration in personal consumption expenditures (PCE) services prices associated with the treatment of insurance payments resulting from the September 11 terrorist attacks. Implicit prices for workers' compensation and the expense of handling life insurance declined because the increase in benefit payments resulted in a reduction in the average net premium paid for insurance services, as described below. Excluding the insurance-related price effects, the gross domestic purchases price index increased 0.5 percent in the third quarter. The PCE price index decreased 0.4 percent in the third quarter; excluding the insurance-related price effects, the PCE price index increased 0.8 percent.

The price index for GDP increased 2.1 percent in the third quarter, the same increase as in the second. The third-quarter increase in the price index for GDP in contrast to the decrease in the price index for gross domestic purchases primarily reflected import prices. Import prices decreased 17.4 percent in the third quarter, reflecting decreases in services prices and in both petroleum and nonpetroleum products prices. The decrease in import services prices primarily reflected the treatment of insurance claims; the implicit price for insurance services from foreign insurers and reinsurers declined because the increase in claims resulted in a reduction in the average net premium paid for insurance services, as described below. Excluding the price effects of the insurance-related imports of services and of the insurance-related PCE services, the GDP price index increased 1.2 percent in the third quarter.

Disposable personal income and personal saving: Real disposable personal income (DPI) increased 12.8 percent in the third quarter, after increasing 2.4 percent in the second. Current-dollar DPI increased 12.3 percent, following an increase of 3.8 percent. The sharp acceleration in third-quarter DPI primarily reflected a sharp downturn in federal personal tax payments associated with special refund checks sent to taxpayers during the quarter. Personal saving -- current-dollar DPI less personal outlays -- was $286.7 billion in the third quarter, compared with $81.5 billion in the second. The personal saving rate -- saving as a percentage of DPI -- was 3.8 percent in the third quarter, compared with 1.1 percent in the second.

Source Data for the Advance Estimate

The advance GDP estimate for the third quarter is based on source data that are incomplete and that are subject to revision. Three months of source data are available for consumer spending on goods; investment in private equipment other than aircraft; motor vehicle sales and inventories; manufacturing durables inventories; federal government outlays; and consumer, producer, and international prices. Only two months of data are available for most other key data sources; BEA's assumptions for the third month are shown in table A.

- For the change in nondurable manufacturing inventories, a decrease was assumed for September;
- For the change in non-motor-vehicle merchant wholesale and retail inventories, a small increase was assumed for September;
- For exports of goods, excluding gold, a large decrease was assumed for September;
- For imports of goods, excluding gold, a large decrease was assumed.

Effects of the September 11 Terrorist Attacks

We at BEA extend our deepest sympathy to the victims of the terrorist attacks and to their grieving families and friends.

The national income and product accounts (NIPA's) show the composition of production and the distribution of incomes earned in production; thus, the NIPA's include the economic effects of the terrorist attacks on September 11, 2001, and of natural disasters such as hurricanes and earthquakes. Most of the effects of disasters on GDP and on other NIPA aggregates are reflected in the usual source data, such as the Census Bureau's monthly data on retail sales. For certain components, however, BEA prepares adjustments to account for the effects of a disaster not captured in the source data. The following paragraphs describe BEA's adjustments to GDP and gross domestic income for the terrorist attacks. Because most of the effects of the attacks are embedded in the source data and cannot easily be separated out, BEA will not attempt to quantify the total impact of the attacks on GDP or on other major aggregates.

<u>Lease of the World Trade Center towers</u>: In July 2001, the Port Authority of New York leased the twin towers and other properties at the World Trade Center to two private corporations on a 99-year lease. This lease was treated in the NIPA's as a sale of an existing asset, which raised private investment for the third quarter by $12.8 billion at an annual rate and lowered state and local government investment by the same amount; these amounts offset and did not affect GDP.

<u>Real GDP</u>: None of the disaster-related adjustments made by BEA had a major effect on real GDP. Within PCE for services, adjustments lowered some components of spending (motor vehicle rental, spectator sports, amusement parks) and raised others (video cassette rental); the net effect of these adjustments was to lower PCE for services by about $0.7 billion. Within state and local government, an adjustment for police and fire fighters' overtime wages raised spending by about $0.8 billion. Thus, the net effect of these adjustments on real GDP was negligible. It should be emphasized, however, that some of the regular source data, such as retail sales and airline revenue passenger miles, show large declines for September that presumably reflect the aftermath of the terrorist attacks.

<u>Current-dollar GDP and prices</u>: Under NIPA conventions, expenditures for life insurance are based on the operating expenses of the insurer (including profits) and expenditures for other types of insurance are defined as premiums less benefit payments. Within PCE for services, the life insurance expenditures were adjusted downward to reflect the effects of benefits paid by life insurance companies, and workers' compensation and motor vehicle insurance were adjusted downward to reflect benefit payments; the net effect of these adjustments was to lower current-dollar PCE by $20.5 billion at an annual rate. Within imports of services, other private services was adjusted downward to reflect claims for reinsurance, lowering imports by $44 billion at an annual rate. State and local government spending was adjusted downward by $0.8 billion at an annual rate to reflect insurance benefit payments to general government. (Insurance benefits paid to private business or to government enterprises are treated as

intermediate inputs and do not affect the estimate of GDP.) The net effect of these adjustments was to lower gross domestic purchases by $21.3 billion and to raise GDP by $22.7 billion. BEA treated these adjustments to current-dollar GDP as changes in the implicit prices for insurance services, so real GDP was not affected. Consequently, these adjustments for disaster-related insurance payments lowered the gross domestic purchases price index and raised the GDP price index.

Gross domestic income: Under NIPA conventions, the consumption of fixed capital (CFC) is increased to reflect the catastrophic destruction of fixed assets owned by private businesses or by government enterprises. For fixed assets owned by general government (such as the Pentagon), however, no adjustments are made to CFC for catastrophic destruction because CFC is included in government spending as a partial measure of the services of government capital. Instead, the destruction is recorded as a direct reduction to the stock of general government fixed assets. The approximate value of the private and government enterprise assets that were destroyed (valued at current cost, less accumulated depreciation) was $15.5 billion, so CFC for the third quarter was increased by $62.1 billion at an annual rate.

The estimates of wages and salaries were also adjusted because the regular source data on employment, hours, and earnings are from the Bureau of Labor Statistics monthly employment survey, which covers the mid-month pay period; thus, for September, these data did not fully reflect the changes to labor markets following the September 11 attacks. BEA's adjustments to wages reflected a mixture of decreased hours due to work interruptions, decreased employment due to layoffs, and increased hours due to overtime work. The net effect of the adjustments made by BEA was to lower private wages and salaries by $3.3 billion and, as already mentioned, to raise state and local government wages by $0.8 billion.

The third-quarter estimate of corporate profits is scheduled to be released on November 30. The profits of insurance carriers will be reduced to reflect the payment of insurance benefits, and the profits of other corporations and the surplus of government enterprises will be reduced to reflect any uninsured losses.

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Table A.--KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP FOR THE THIRD QUARTER OF 2001

For many of the key series used to prepare the advance estimate of GDP, including sales of retail stores, unit automobile and truck sales and inventories, manufacturers' shipments of nondefense capital goods (other than aircraft), manufacturers' inventories of durable goods, federal defense spending, and consumer and producer price indexes, actual data are available for all months of the quarter.

For the key series shown in this table, actual data for the third month of the quarter usually are not available in time for inclusion in the advance GDP estimate. BEA makes assumptions for the source data that are not yet available; assumptions for September 2001 are shown in the last column of the table. For most series shown, the data for August are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision.

All series shown in the table are in billions of dollars, seasonally adjusted at annual rates, and are published by the Bureau of the Census.

		2001					
		Apr.	May	Jun.	Jul.	Aug.	Sep.*
	Private fixed investment:						
	Nonresidential structures:						
	Buildings:						
1	Value of new nonresidential construction put in place......	220.6	211.7	210.8	204.0	196.7	191.8
	Equipment and software:						
2	Manufacturers' shipments of complete aircraft....................	36.0	40.7	45.0	48.8	45.1	34.4
	Residential structures:						
	Value of new residential construction put in place:						
3	1-unit structures.....................	244.8	246.8	247.5	247.7	247.8	246.3
4	2-unit-or-more........................	29.9	32.0	31.0	31.6	30.8	30.6
	Change in private inventories:						
5	Change in inventories for nondurable manufacturing.........................	-3.3	-7.6	-16.7	-8.5	-10.4	-11.6
5a	Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment..	-6.0	14.3	-26.3	-44.9	20.1	4.4
	Net exports:						
	Exports of goods:						
6	U.S. exports of goods, international-transactions-accounts basis.........................	746.0	754.2	730.2	704.3	713.5	675.8
6a	Excluding gold......................	738.2	746.2	723.1	701.2	711.0	673.5
	Imports of goods:						
7	U.S. imports of goods, international-transactions-accounts basis........................	1197.9	1167.5	1156.8	1134.3	1119.3	1064.2
7a	Excluding gold......................	1192.3	1159.7	1150.8	1132.4	1116.9	1062.2
8	Net exports of goods...................	-451.9	-413.4	-426.6	-430.0	-405.7	-388.4
8a	Excluding gold.......................	-454.1	-413.5	-427.7	-431.2	-406.0	-388.7
	State and local government structures:						
9	Value of new construction put in place...............................	179.8	184.9	182.6	188.1	187.3	187.3

*Assumption.